



## How to Create, Test and Remediate Presentations for Section 508 Conformance Using MS PowerPoint

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## ***Background***

The purpose of this document is to assist individuals in creating, testing, and remediating **PowerPoint presentations**, for Section 508 conformance. The guidance provided is based on the Section 508 Baseline Test Guide for PowerPoint, and the Section 508 PowerPoint Checklist authored by the Accessible Electronic Document Community of Practice (AED COP). For more information on the AED COP, to download the latest AED COP guidance, and to gain access to a detailed test process, visit [the Federal Section 508 website](#).

## ***How to Read This Document***

This document is comprised of two sections:

1. The AED COP PowerPoint Checklist.
2. Instructions on how to remediate PowerPoint presentations for Section 508 compliance.

For more information on how to remediate PowerPoint presentations or to request training, please [contact your agency Section 508 Coordinator](#) or email [Section508-OCIO@usda.gov](mailto:Section508-OCIO@usda.gov).

## ***AED COP PowerPoint Checklist***

When creating an accessible PowerPoint presentation, or when reviewing a PowerPoint presentation for Section 508 conformance, the following conditions must be considered. The response to each criterion should be **Yes** or **Not Applicable** to be considered accessible. If **No** is selected, the issue must be resolved to be considered accessible.

For ease of use, Microsoft's Accessibility Checker is located on Microsoft's main menu under **File > Info > Check for Issues > Check Accessibility**.

**Note:** Due to the human-centric nature of accessibility and Section 508 conformance, content creators must ensure individuals with disabilities are able to request additional formats and corrections that may not be detected using automated tools, i.e., improper use of color coding.

### **Document Formatting**

<b>A. The filename is descriptive and saved as a PowerPoint (.pptx) presentation.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
The filename is descriptive and identifies the document or its purpose.			
The file type is in a PowerPoint presentation (.pptx) format.			

### **Text Formatting**

<b>B. The reading order matches the visual layout.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
Objects match the visual reading order on each slide.			

<b>C. Lists are correctly formatted.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
One of the built-in list features (i.e., Bullets or Numbering) is used to create lists.			

<b>D. Columnar Content is correctly formatted.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
The correct number of columns are highlighted.			

<b>E. Text is formatted for the correct language.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
The text language matches the PowerPoint Presentation's proofing language.			

<b>F. Link names are descriptive.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
Link names are meaningful and descriptive of the destination, function, or purpose.			

### **Object Formatting**

<b>G. Vital information in the background is duplicated in the document.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
Vital information in the Selection pane can be selected.			

<b>H. Data tables are created using built-in features.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
Data tables are not pictures.			
Data tables do not have merged/split cells.			

<b>I. Images and other objects have alternative text.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
Images, objects, and shapes have descriptive text as alternative text, or in surrounding text.			
Decorative images or objects have at least one space between quotation marks to allow assistive technology to bypass the image or object (i.e., “”).			

<b>J. The presentation has no flashing objects.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
All flashing objects are excluded in the document.			

### **Color Formatting**

<b>K. Colors and other visual information (i.e., size, shape, and location) is also described textually.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
Text duplicates the meaning of the color or other sensory characteristics.			

<b>L. The color contrast between text and the background is sufficient.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
The color contrast ration passes WCAG Level AA.			

### **Multimedia**

<b>M. Descriptions of embedded audio, video, and multimedia files are correct.</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
For audio-only, the transcript is accurate and complete.			
For video-only, the text description is accurate and complete.			
For multimedia, the synchronized captions and audio description are accurate and complete.			

## ***Testing Presentations for Accessibility***

This section provides detailed guidance on how to make MS PowerPoint presentations accessible.

### **Document Formatting Instructions**

The filename must be clear, concise, and descriptive, and the file must be saved in the .pptx format. The filename should identify the document and its purpose in order to assist others in locating the correct file.

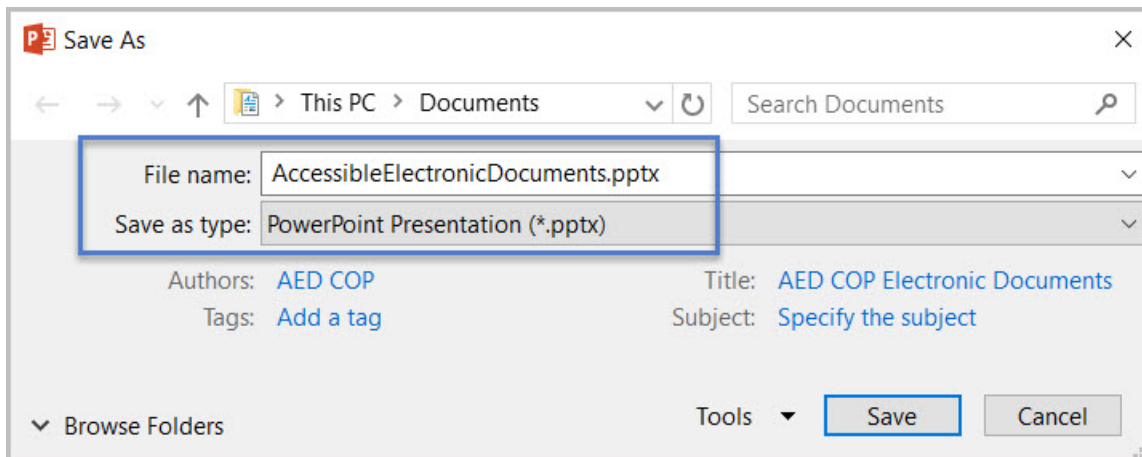


Figure 1: Descriptive Filenames

### **Reading Order Instructions**

The order in which assistive technology reads each slide must match the visual layout. To ensure the proper reading order:

1. Open the **Selection Pane** by navigating to the **Home** tab and selecting **Drawing > Arrange > Selection Pane**.
2. The first object on the slide will be displayed at the bottom of the **Selection Pane**. Starting from the bottom, select each object to view the reading order on the slide.
3. If the order of selection list does not match the visual layout, manually reorder the list until it matches the visual layout.

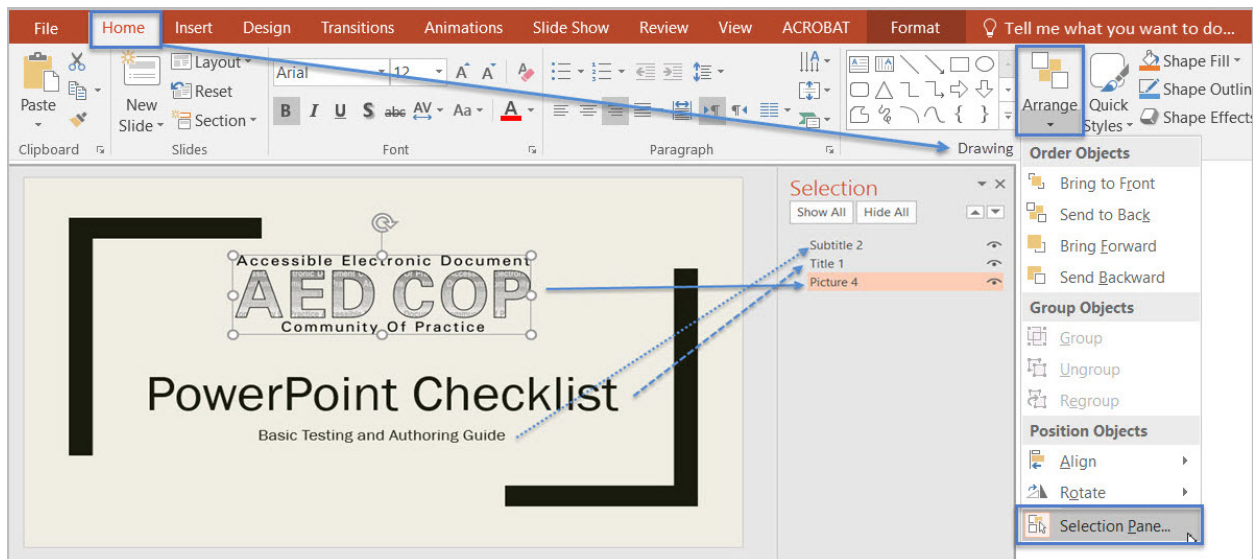


Figure 2: Selection Pane

**Note:** The order in which objects are added to the page typically determines the order they will appear in the **Selection Pane**. Remember to start from the bottom of the list to determine the proper order.

### **List Formatting Instructions**

Lists must be created using the standard options provided in the **Bullet and Numbering System** found in the **Home** tab under the **Paragraph** section. Unordered lists must be created using the Bullet Library, while ordered lists must be created using the Numbering Library.

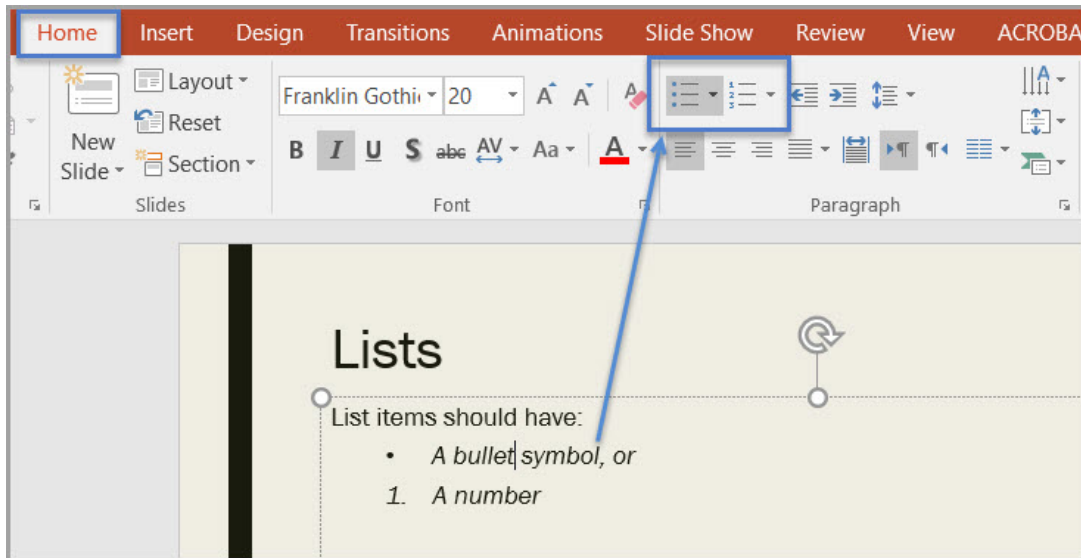


Figure 3: Bullet and Numbering System

**Note:** Avoid using custom images for Bullets (i.e., arrows, diamonds, custom icons, etc.). When converting to PDF, lists with custom Bullets are misinterpreted as plain text next to an image.



### **Column Formatting Instructions**

Columnar text must be formatted using the **Add or Remove Columns** option, which can be found on the **Home** tab in the **Paragraph** section. The number of columns in this view must match the number of columns visually on the slide.

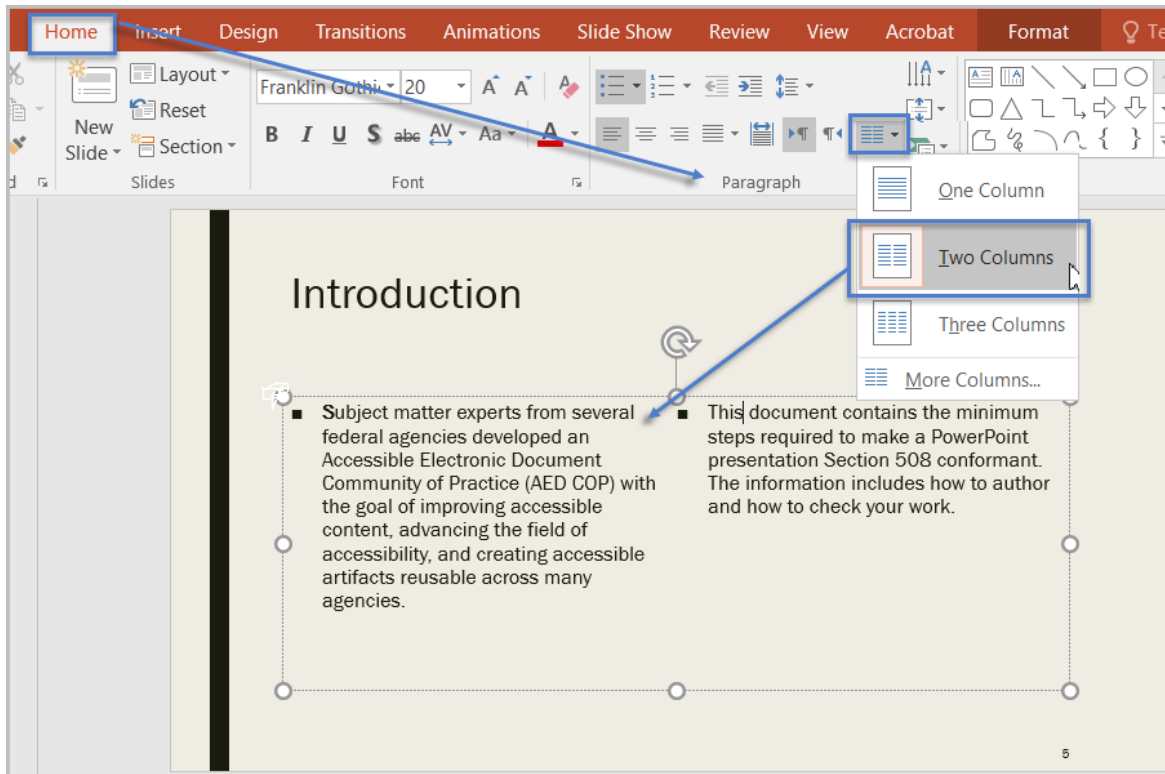


Figure 4: Column Formatting Window

Select **Home tab > Paragraph > Add or Remove Columns** and choose the preferred number of columns when creating columnar text.

### **Language Formatting Instructions**

**Note: If the document only uses one language, you do not have to perform this test.**

If the presentation contains words or phrases in a language other than the predominant language, complete the following steps:

1. Place your cursor on the text.
2. In the **Review** tab, navigate to **Language Group > Language Button > Set Proofing Language**.
3. Select the appropriate language for the text.

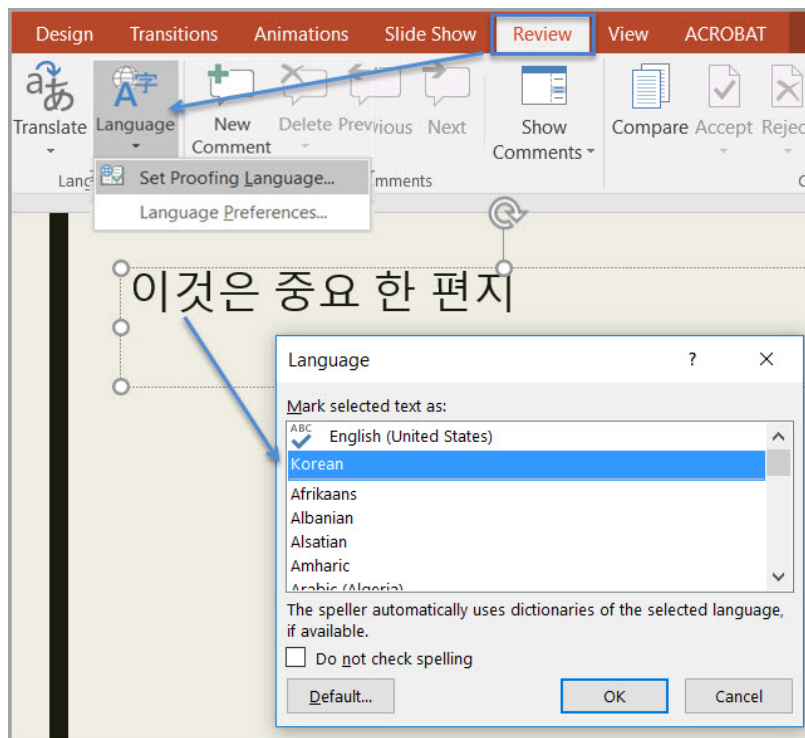


Figure 5: Setting Proofing Languages

All text must be formatted in its respective language to ensure accessibility.

### **Link Description Instructions**

All hyperlinks throughout the presentation must have clear, concise, and meaningful descriptions that describe their destination, function, and/or purpose **OR** this information is discernable within context.

- Example of a **Uniquely Named Link**: [www.section508.gov](http://www.section508.gov)
- Example of a link description **Discernable Within Context**: [Get My Section 508 Questions Answered](#)
- Example of an unclear link description without context: [click here](#)

To create a hyperlink:

1. Select the descriptive text, right click, and select “**Hyperlink**” **OR** use “**Ctrl + K**” to open the **Insert Hyperlink** configuration window.
2. Verify that the descriptive text matches the information in the **Text to Display** field.
3. Enter or paste the URL into the **Address** field and select **OK**.

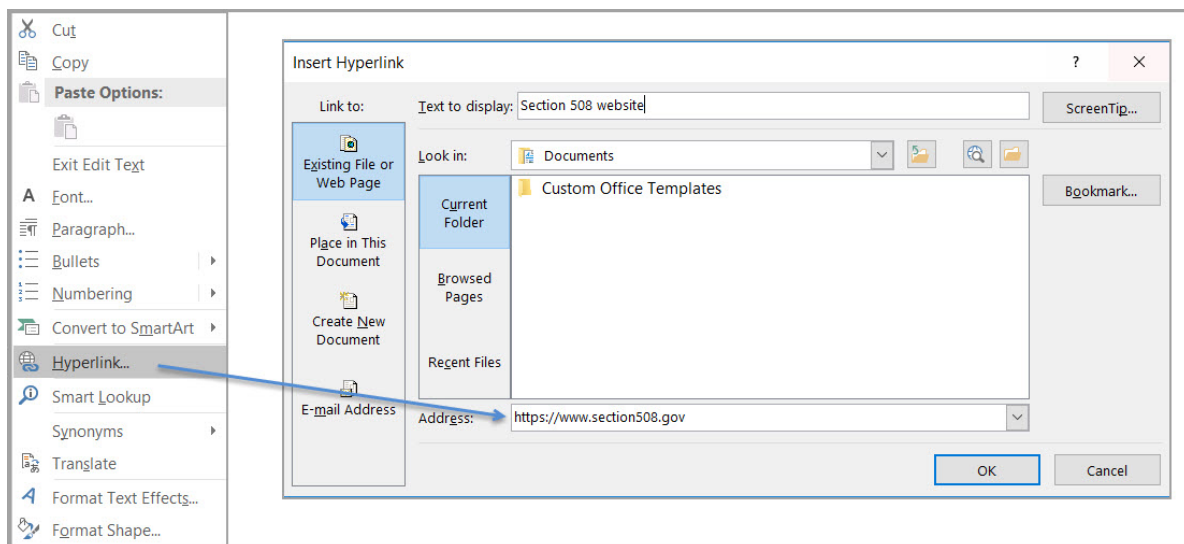


Figure 6: Hyperlinks

## **Object Formatting Instructions**

### **Headers and Footers**

Vital information in headers, footers, and watermarks must also be included the correct reading order in the **Selection Pane**. The **Selection Pane** can be found on the **Home** tab under **Drawing > Arrange > Selection Pane**.

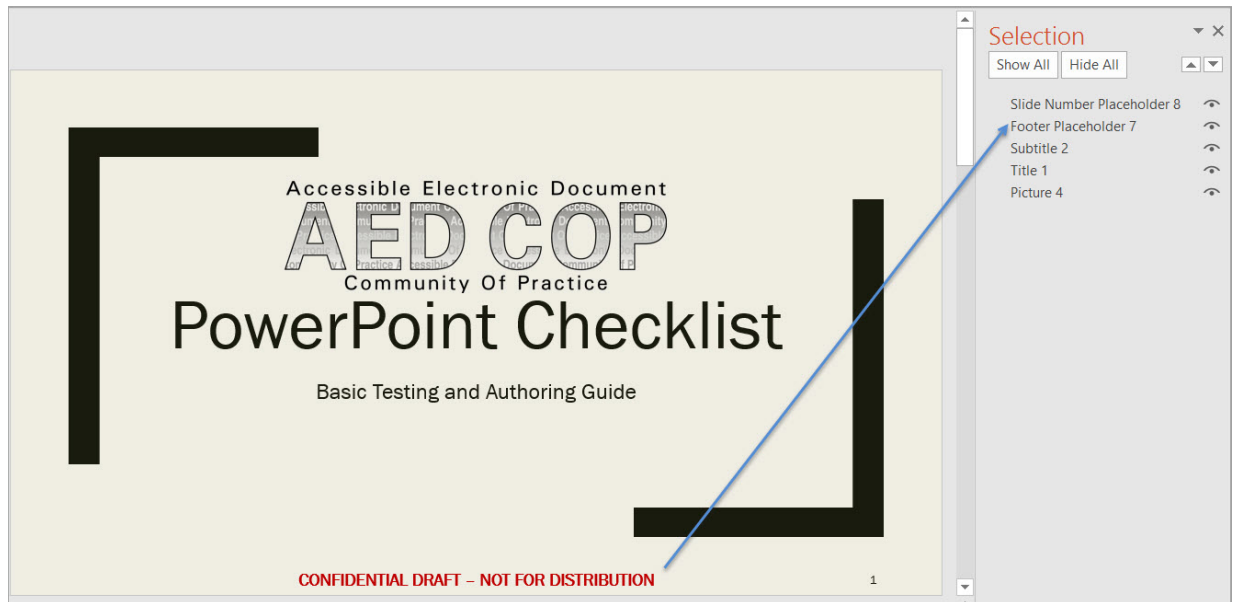


Figure 7: Headers and Footers

**Note:** The reading order is determined from the bottom up in the **Selection Pane**.

Headers and Footers must be enabled for the information to be found in the **Selection Pane**. To enable Headers and Footers in the presentation:

1. On the **Insert** tab, navigate to **Text > Header & Footer**.
2. Check the **“Footer”** option.
3. Enter the information and select **“Apply.”**

### Data Tables

To create an accessible data table, navigate to the **Insert** tab, select **Table Group > Insert Table**, and select the number of rows and columns.

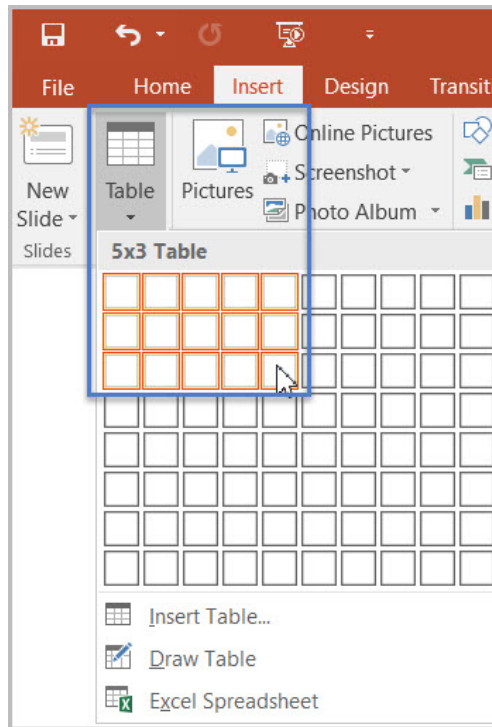


Figure 8: Creating Tables

**Note:** Complex data tables with merged/split cells or multiple header rows/columns cannot be made accessible in MS PowerPoint. The presentation must be converted into PDF and the table remediated in **Adobe Pro DC**.

To evaluate data tables for accessibility:

1. Tables must be created using built-in features and cannot be an image. To determine if a table on a slide is an image, select the table and check tab appears in the Ribbon. If the “**Picture Tools**” tab appears, the table is an image. If the “**Table Tools**” tab appears, continue to the next step.

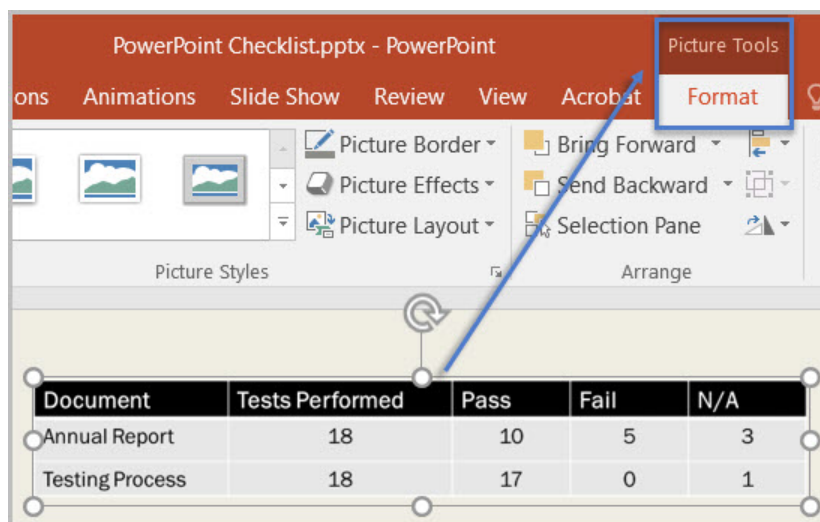


Figure 9: Properly Formatted Table Example

2. Ensure that the table does not have merged or split cells. Select the table and use your **Tab Key** to move between each data cell and determine if a cell spans multiple rows or columns.  
Example of an accessible data table:

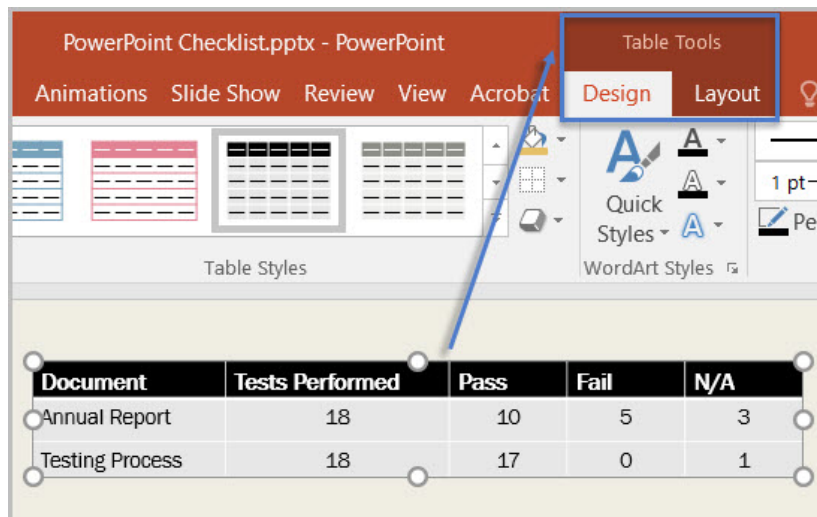


Figure 10: Accessible Table Example

### Alternative Text

Alternative text is a concise description detailing the purpose of images and similar objects. Without alternative text, users that are unable see the images in the document will not be able to access all the information provided in the document.

Right click an image or object and select **Format Picture/Object/Shape**. Select the **Size and Properties** icon and enter alternative text in the **Description** box.

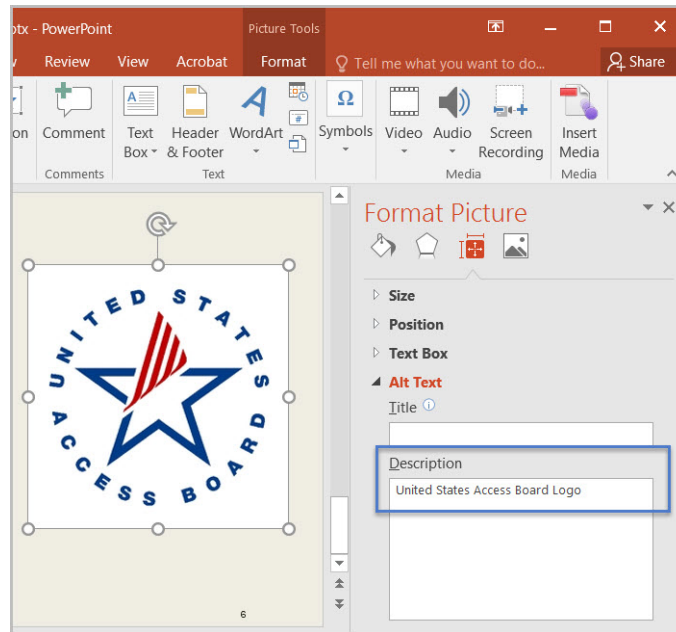


Figure 11: Alternative Text for Images

If the image is decorator and can be skipped by assistive technology, enter two spaces between quotation marks (i.e., “ ”) in the **Description** box.

## **Color Formatting Instructions**

### **Visual Cues and Color Coding**

The use of color cannot be the sole method to convey significance or meaning. To provide comparable access to people who are blind/colorblind or have low vision, a combination of visual and non-visual characteristics should be used.

Example: The following layout tables describe the progress for three projects using colors to symbolize the current project status. The first table fully relies on color, while the second uses a combination of color and text to convey meaning:

Table 1: Improper Use of Color

<b>Project</b>	<b>Status</b>
<b>Project A</b>	
<b>Project B</b>	
<b>Project C</b>	

Table 2: Proper Use of Color

<b>Project</b>	<b>Status</b>
<b>Project A</b>	<b>On Time</b>
<b>Project B</b>	<b>At Risk</b>
<b>Project C</b>	<b>Late</b>



### Color Contrast

**Note:** This test requires the use of an external application called [Colour Contrast Analyzer](#) that can be executed without downloading. If using the default settings (white background and black text), skip this test.

The visual presentation of text and images that contain text must have a minimum contrast level of **4.5:1** for regular text and **3:1** for large text -- over 18pt not bolded, over 14pt if bold -- to meet the **WCAG Level AA requirement**.

Run the [Colour Contrast Analyzer](#) and drag the **Foreground Eyedropper** tool over a sample of the text color. Repeat this step using the **Background Eyedropper** tool and a sample of the background color. If the contrast ratio is greater than **4.5:1** for regular text and **3:1** for large text, the color contrast is sufficient.

Figure 12: Colour Contrast Analyzer with Passing Score

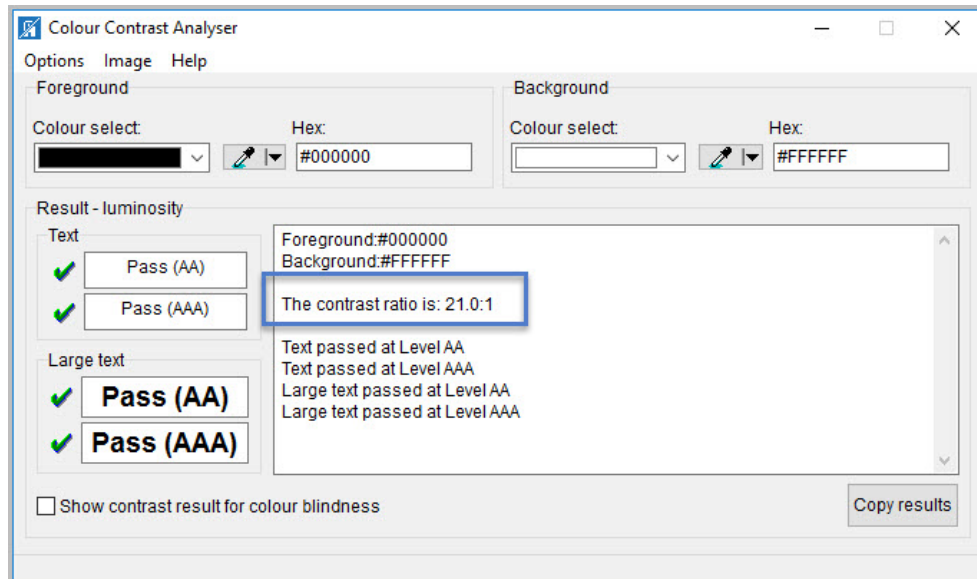
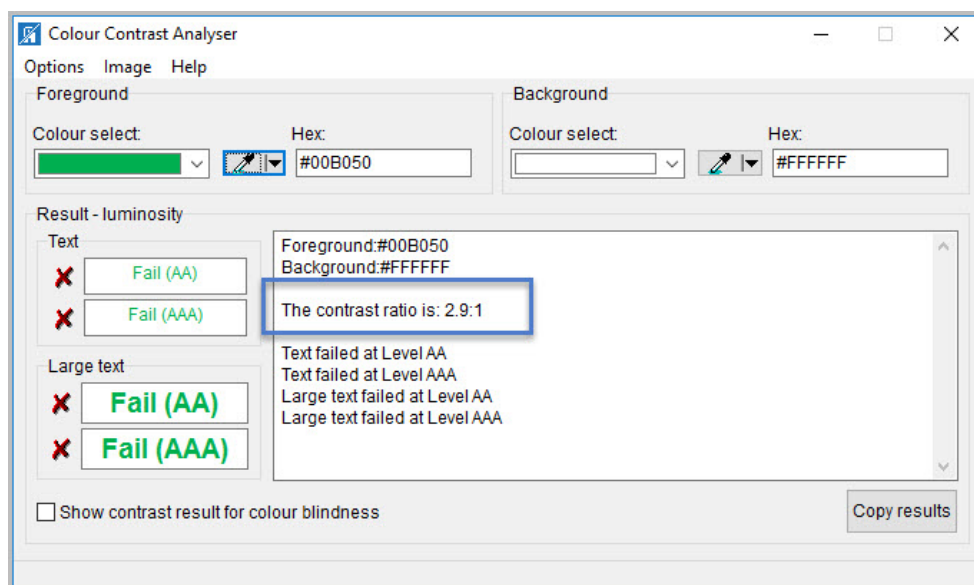


Figure 13: Colour Contrast Analyzer with Failing Score



**Note:** Incidental text, text overlaid on images, and logotypes are exempt.

The table below provides examples of accessible and inaccessible color contrast ratios:

Accessible Color Contrast	Inaccessible Color Contrast
<b>White text on black background</b> ratio 21.0:1	<b>Dark gray text on black background</b> ratio 3.0:1
<b>Dark green text on yellow background</b> ratio 7.6:1	<b>Orange text on yellow background</b> ratio: 2.1:1
<b>Light blue text on dark blue background</b> ratio: 10.5:1	<b>Red text on dark blue background</b> ratio: 1.1:1
<b>white text on red background</b> ratio: 6.5:1	<b>Dark green text on red background</b> ratio: 1.3:1

Table 3: Contrast Examples

### **Multimedia Instructions**

Descriptions of embedded audio, video, and multimedia files must be provided to ensure individuals with disabilities have comparable access to the information. The descriptions must be tested for accuracy and completeness.

Type of Media	Description Requirement
<b>Audio-Only</b>	Transcript
<b>Video-Only</b>	Text Description
<b>Multimedia (audio and video)</b>	Synchronized captions and audio descriptions
<b>Flashing Objects</b>	<b>Do not use flashing objects.</b>

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